

Antibiotic regimens for common infections

Upper Respiratory Infections

Otitis media – cover for *Pneumococcus*, *Haemophilus* and *Moraxella*

- Amoxicillin (first-line)
- Amoxicillin/clavulanate (second-line)

Bacterial sinusitis – cover for *Pneumococcus*, *Haemophilus* and *Moraxella*

- Amoxicillin (first-line)
- Amoxicillin/clavulanate (second-line)

Bacterial pharyngitis – cover for group A streptococci

- Penicillin
- Amoxicillin

Lower Respiratory Infections

Community-acquired pneumonia – cover for “typical” bugs (*Pneumococcus*, *Haemophilus*, *Moraxella*) & “atypical” bugs (*Mycoplasma*, *Chlamydia*, *Legionella*)

- Azithromycin (otherwise healthy patient)
- Azithromycin + ceftriaxone (patient with comorbidities)
- Levofloxacin (patient with comorbidities)

Nosocomial pneumonia – cover for MRSA and *Pseudomonas*

- Vancomycin + piperacillin/tazobactam
 - Vancomycin + cefepime
 - Vancomycin + doripenem
 - Vancomycin + aztreonam
- **may add levofloxacin or gentamicin to double cover for *Pseudomonas*

Aspiration pneumonia – cover for anaerobes

- Clindamycin
- Amoxicillin/clavulanate

Pneumocystis jiroveci pneumonia

- Trimethoprim/sulfamethoxazole + prednisone
- **TMP/SMX prophylaxis for all HIV patients with CD4 count <200!

Gastrointestinal Infections

Gastritis – triple therapy for *H. pylori*

- Amoxicillin + clarithromycin + proton pump inhibitor

Bacterial colitis – cover for *E. coli* and gram-negative enterics

- Ciprofloxacin

C. difficile colitis

- Metronidazole (first-line)
- PO vancomycin (second-line)

Oropharyngeal abscess – cover for anaerobes

- Clindamycin
- Amoxicillin/clavulanate

Peritonitis or intra-abdominal abscess – cover for anaerobes

- Metronidazole
- Piperacillin/tazobactam

Genitourinary Infections

Cystitis – cover for *E. coli* and gram-negative enterics

- TMP/SMX
- Ciprofloxacin
- Nitrofurantoin (commonly used in pregnancy)

Pyelonephritis – cover for *E. coli* and gram-negative enterics

- Ciprofloxacin

Vaginitis – cover for *Gardnerella* and *Trichomonas*

- Metronidazole

Pelvic inflammatory disease – cover for gonorrhoea and chlamydia

- Ceftriaxone + azithromycin
- Ceftriazone + doxycycline

Syphilis – cover for *Treponema pallidum*

- Penicillin

Skin and Soft Tissue Infections

Erysipelas – cover for group A streptococci

- Penicillin

Simple cellulitis – cover for group A streptococci and MSSA

- Dicloxacillin
- Cephalexin

MRSA cellulitis

- Doxycycline
- Clindamycin
- TMP/SMX

Bloodstream Infections

GPC bacteremia – cover for MRSA and *Staph epidermidis* (indwelling lines)

- Vancomycin
- Linezolid
- Daptomycin

GNR bacteremia – cover for *Pseudomonas*

- Piperacillin/tazobactam
 - Cefepime (also ceftazidime)
 - Doripenem (also imipenem or meropenem)
 - Aztreonam
- **may add levofloxacin or gentamicin to double cover *Pseudomonas*

Febrile neutropenia

- Cefepime (common Step2CK question!)
 - Piperacillin/tazobactam
 - Doripenem
- **may add vancomycin in a neutropenic patient with an indwelling catheter (cover for *Strep epidermidis*), low threshold to add anti-fungal coverage with IV micafungin, voriconazole or posaconazole

Central Nervous System Infections

Adult meningitis – cover for *Pneumococcus* and *Meningococcus*

- Ceftriaxone + vancomycin

Neonatal meningitis – cover for group B streptococci, *E. coli* and *Listeria*

- Ampicillin + gentamicin

Tick-borne Infections

Lyme disease

- Doxycycline
- Amoxicillin (used in children)

Rocky Mountain Spotted Fever

- Doxycycline

- Chloramphenicol (used in pregnancy)

Ehrlichiosis

- Doxycycline